

Well Production Integrity Management

5 days

WELINTM-EN-P

Overview

LEVEL

Skilled

PURPOSE

To deepen knowledge of well integrity management and develop the skills for designing, operating and maintaining well equipment with the ultimate objective of ensuring a permanent, safe containment of all wellbore fluids.

LEARNING OBJECTIVES

Upon completion of the course, participants will be able to:

- recognize the technical, operational and organizational solutions applied to well integrity management,
- design the process of well integrity management,
- review well integrity within the framework of all strategic operations,
- focus, maintain and design of well integrity assurance,
- recognize the role of production supervisor's duties with regard to well integrity.

LEARNING ASSESSMENT

Quiz.

PREREQUISITES

Knowledge of well completion equipment, well operations, well intervention and/or HSE engineering.

Agenda

WELL INTEGRITY MANAGEMENT: DEFINITION & CHALLENGES

0.25 d

Introduction.
Assets.
Organization and people.
WI Direction.

WELL INTEGRITY DESIGN

1.5 d

Well construction/completion: casing, tubing, cement, produced fluids.
Well barriers: definition, requirement and design.
Wellhead and tree equipment: valves, seals, accessories.
Safety valves: downhole, surface.
Well integrity standards.

WELL INTEGRITY OPERATIONS

2 d

Flow assurance (corrosion, sand & deposits).
Safety critical equipment/barriers.
Monitor and manage a pressure:
Role and responsibilities.
Monitor/perform well equipment test.
Ensure safety critical equipment are operational.

Report any abnormal operating condition.
Your role over the various operational life of the well.
Well integrity maintenance:
Downhole/well equipment maintenance.
Surface equipment maintenance.
Plan & execute maintenance. Well reinstatement.
Your role as a part of well integrity team:
Perform routine maintenance (site specific requirement).
Prepare well for maintenance/well intervention operation.
Restart well after maintenance operation.
Today's successful well integrity team:
HSE goal and leadership.
Understand site specific well design decision/equipment.
Handover and reporting best practices.
Major incident prevention by implementing WIM awareness.

WELL INTEGRITY MANAGEMENT (WIM)

1 d

Introduction, concepts and definitions.
WIM key activities.
Minimum integrity requirements vs. well life cycle/phases.
Annulus pressure management.
Data management.
Well integrity review.
Well integrity performance management.

KNOWLEDGE ASSESSMENT

0.25 d